ABSTRACT OF THE DISCLOSURE

An optical storage drive having a content-based drive-speed variation capability. The optical storage drive contains a drive speed lookup table that stores drive speeds corresponding to file types or groups of file types. For a given file type, a corresponding coded drive speed is provided to the motor control hardware registers. Based upon the coded drive speed provided the drive voltage is limited to produce a desired drive speed. In one embodiment, the optical storage drive may reduce energy consumption by ascertaining the file type to be read and rotating the optical disk at a reduced speed based upon the file type.